

First non-Provisional Patent application:
Self powered electronically controlled mixing valve -- Inventor: Eric Delangis

ABSTRACT:

The present invention provides a means to add electronic control of temperature and flow rate for fluids in standard faucets. The device is self powered by means of the fluid flowing through it and generates sufficient power to operate the control electronics. Elimination of an external power source or internal battery, is important for simple retrofit installations as well as maintenance free operation for many years.

The invention consists of two components that communicate with each other via either an RF (radio frequency), IR (infra red) or a wired link. The Mixing Unit serves to mix the incoming hot and cold fluids (typically water but any fluid can be mixed) to a desired temperature under control of the Main Control Unit. The Main Control Unit provides a means by which the user can adjust the temperature as well as automatically turn on and off the fluid flow.